

Application No. 09/677,742

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-8. (Cancelled)

9. (Previously presented) An imaging apparatus, comprising:

a first imaging subarray comprising a first printed wiring board having a joining end and a plurality of first semiconductor imaging chips mounted on the first printed wiring board, including a first end chip, wherein a portion of the first end chip projects beyond the joining end of the first printed wiring board;

a second imaging subarray comprising a second printed wiring board having a joining end, and a plurality of second semiconductor imaging chips mounted on the second printed wiring board, including a second end chip, wherein a portion of the second end chip projects beyond the joining end of the second printed wiring board; and

a glass tie bar connecting the first and second imaging subarrays, wherein:

a first portion of the glass tie bar is attached to the first printed wiring board with a light-curable adhesive; and

a second portion of the glass tie bar is attached to the second printed wiring board with a light-curable adhesive.

Application No. 09/677,742

10. (Original) The imaging apparatus of **claim 9**, wherein the first and second imaging subarrays are positioned so that the end chip of the first imaging subarray is adjacent the end chip of the second imaging subarray.

11. (Previously presented) The imaging apparatus of **claim 10**, additionally comprising a second glass tie bar connecting the first and second imaging subarrays, wherein:

a first portion of the second glass tie bar is attached to the first printed wiring board with a light-curable adhesive; and

a second portion of the second glass tie bar is attached to the second printed wiring board with a light-curable adhesive.

12. (Original) The imaging apparatus of **claim 11**, wherein:
the first imaging chips are linearly aligned with one another on the first printed wiring board;

the second imaging chips are linearly aligned with one another on the second printed wiring board; and

the first and second imaging subarrays are positioned so that the first and second imaging chips are linearly aligned with one another.

13. (Original) The imaging apparatus of **claim 12** wherein:
the end chip of the first semiconductor imaging chip projects approximately 0.015 inch beyond the joining end of the first printed wiring board; and

Application No. 09/677,742

the second semiconductor imaging chip projects approximately 0.015 inch beyond the joining end of the second printed wiring board.

14. (Previously presented) The imaging apparatus of **claim 13** wherein the glass tie bars have a coefficient of thermal expansion substantially similar to the coefficient of thermal expansion of the first and second chips.

15. (Previously presented) The imaging apparatus of **claim 13** wherein the glass tie bars have a coefficient of thermal expansion of approximately 3.25 parts per million per degree Celsius.

16. (Previously presented) The imaging apparatus of **claim 11** wherein the glass tie bars are substantially transparent to the light appropriate for curing the light-curable adhesive.

Application No. 09/677,742

17. (Original) A method of forming an imaging apparatus, the method comprising:

forming a first imaging subarray comprising a first printed wiring board having a joining end and a plurality of first semiconductor imaging chips mounted on the first printed wiring board, including a first end chip, wherein a portion of the first end chip projects beyond the joining end of the first printed wiring board;

forming a second imaging subarray comprising a second printed wiring board having a joining end and a plurality of second semiconductor imaging chips mounted on the second printed wiring board, including a second end chip, wherein a portion of the second end chip projects beyond the joining end of the second printed wiring board;

bringing the first imaging subarray into proximity with the second imaging subarray so that the first end chip is immediately adjacent the second end chip;

applying light-curable adhesive to the first printed wiring board and to the second printed wiring board;

placing a glass tie bar so that a first portion of the tie bar contacts the light-curable adhesive on the first printed wiring board, and a second portion of the tie bar contacts the light-curable adhesive on the second printed wiring board; and

directing light onto the light-curable adhesive to cure the light-curable adhesive.

Application No. 09/677,742

18. (Original) The method of **claim 17**, wherein the step of directing light onto the light-curable adhesive comprises directing light through the glass tie bar to the light-curable adhesive.

19. (Original) The method of **claim 17**, wherein the step of directing light onto the light-curable adhesive comprises directing ultraviolet light onto the light-curable adhesive.

20. (Cancelled)